

Some Remarks on the 'it seems' Construction

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The goal of this paper is to find out some syntactic properties of the 'it seems' construction from a standpoint of the generative-transformational grammar.

Albert S. Hornby explains a noteworthy usage of the English verbs *seem* and *appear* as follows (Hornby 1954: 32c. § 62):

When the subject of verbs such as *seem* and *appear* is a clause (i.e. a *that* clause¹), preparatory *it* is used and verbs are impersonal. *It seems* (*seemed, appears, appeared*) may be placed in the middle of a long sentence, or occasionally at the end. They are equivalent to adverbs *seemingly* and *apparently*.

- (1) It seemed that the road was still blocked by snowdrifts.
- (2) The road was still, it seemed, blocked by snowdrifts.
- (3) The road was still blocked by snowdrifts, it seemed.
- (4) Seemingly the road was still blocked by snowdrifts.
- (5) The road was still, seemingly, blocked by snowdrifts.
- (6) The road was still blocked by snowdrifts, seemingly.

In order to account for the similarity of cognitive meaning between sentences (1), (2), and (3), I propose to set up a transformational rule which "downgrades" the main clause of this sentence pattern into a constituent of the subordinate clause that appears to be a parenthetical clause in the derived structure, and which simultaneously "upgrades" the original subordinate clause into a new main clause. Let me call this transformation a downgrading transformation. Whereas the downgraded clause is regarded as a marginal constituent of the sentence, the upgraded clause now acts as a main clause which is a central element of the sentence.² Notice the deletion of the conjunction *that* in sentences

¹ Such a construction as 'it seems *as if/as though*~' will not be dealt with in this paper.

² See Poutsma, H. 1928. A grammar of late modern English. Groningen: P. Noordhoff, Part 1, First Half, Ch. 1, 3. The verbs *to seem* and *to appear* are often detached from the verb or verb-

(2) and (3), as a result of the downgrading transformation.

(7) *The road was still, it seemed that, blocked by snowdrifts.

(8) *The road was still blocked by snowdrifts, it seemed that.

How can we explain the formation of the adverb *seemingly* in sentences (4), (5), and (6) which seems to be somewhat related to *it seemed (that)* in sentences (1), (2), and (3) respectively? I just mentioned *it seemed* in sentence (1) as a main clause, because of the subordinate conjunction *that* which accompanies a subordinate clause, but from a semantic viewpoint, it may as well be thought of as a marginal constituent in sentence (1), partly because the verb *seem* is a so-called linking verb preceded by the preparatory subject *it* and partly because the conjunction *that* can often be deleted in everyday speech. It is natural that the downgraded clause, the marginal constituent of the sentence, can optionally become an adverb, as A. Hornby points out, through the application of the sentence adverbialization rule.³ The fact that the adverb *seemingly* in sentences (4), (5), and (6) enjoys a comparatively free word order in sentences, occupying the initial, medial, or final position, strongly suggests that the adverb belongs to the sentence adverb class that modifies the whole sentence. We see there is a close relationship between the downgrading and the sentence adverbialization; for example, if the former can not be applied, the latter does not hold true, either.

(9) a. It does not seem that your suggested solution is workable.

b. *Your suggested solution, it does not seem, is workable.

c. *Your suggested solution is workable, it does not seem.

(10) a. { *Unseemingly
*Not seemingly } your suggested solution is workable.

b. *Your suggested solution { unseemingly
not seemingly } is workable.

group that is the bearer of the main predication, the modal notion they express being mentioned in a member of a complex sentence, as in *It seems (or appears) that he knows me, ... that he is happy*. Such a member is often placed parenthetically in the body of the complex; thus in:

King Edward VII, *it appeared*, was not a great reader. *Westm. Gaz.*, 7/3, 1925, 556c.

The poems were written, *it seems*, by an American poetess. *ib.*, 21/3, 1925, 628 a.

³ See Hornby, A. S. 1954. § 32 c.

See also the following quotation from Poutsma, H. 1928. Ch. 1, 3. It is hardly necessary to state that the adverbs *seemingly* and *apparently* convey practically the same meaning as the corresponding verbs. Observe that in the following quotation the participle *seeming* might be replaced by the adverb *seemingly*:

There was a man in the refreshment room, who insisted upon treating me to champagne—a seafaring-looking man—extraordinarily dressed, and *seeming* half tipsy.—Thack., *Pend.*, 1, Ch. XXVII, 284.

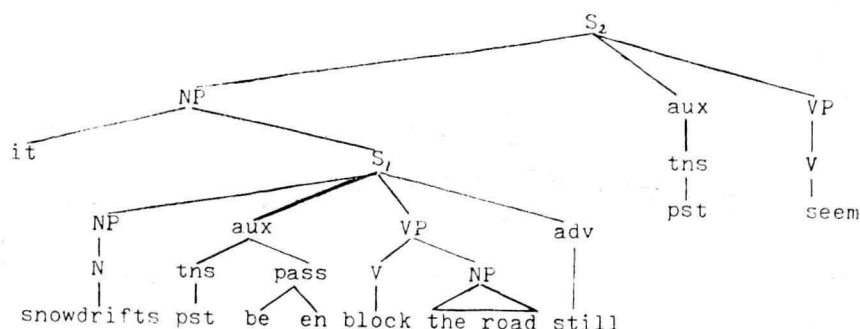
- c. *Your suggested solution is workable, { unseemingly
not seemingly } .

A third transformation involved in this sentence pattern is the *it*-replacement rule which, if applied, can transform sentence (1) into the following sentence (11).

(11) The road seemed to be still blocked by snowdrifts.

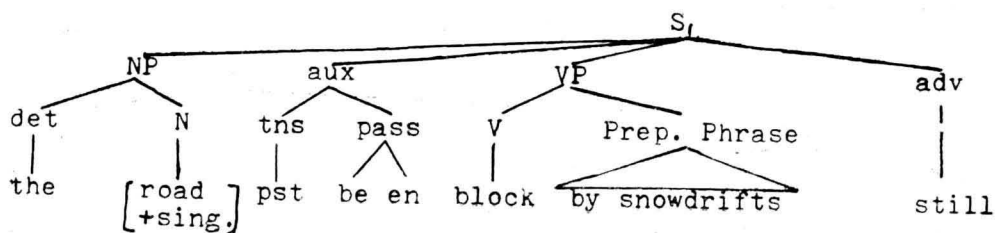
The fact that sentences (1) and (11) are paraphrasable to each other indicates that they are transformationally derived from the same deep structure that is roughly tree-diagrammed as follows; let us trace the process of derivations from the deep to the surface structure.⁴

The deep structure of sentences (1) and (11)



Several rules must be applied on S₁ (more deeply embedded sentence) in the following order.

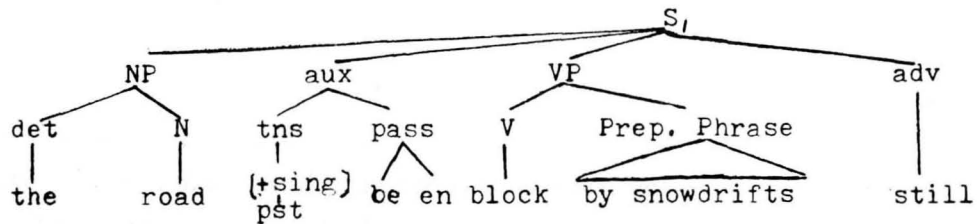
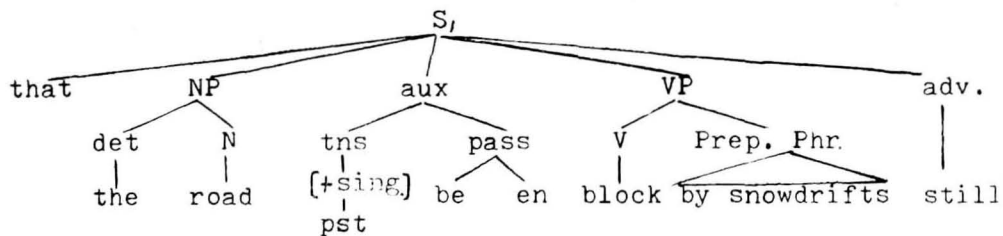
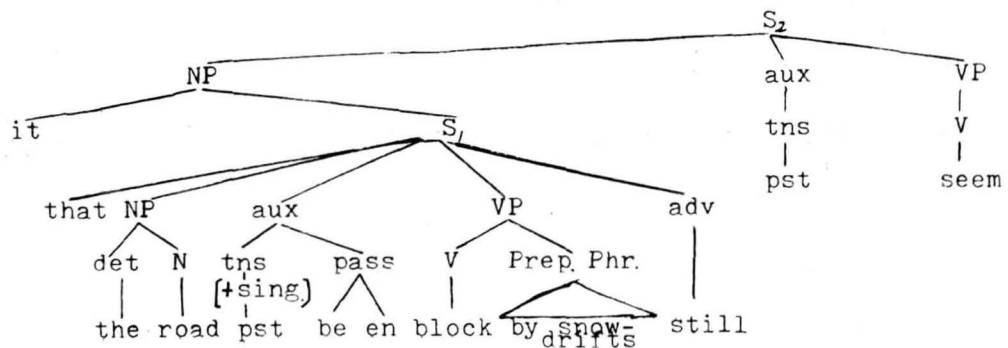
1. Passive applied



⁴ See Burt, Marina K. 1971. From deep to surface structure, an introduction to transformational syntax. N.Y.: Harper & Row.

Throughout this paper, I will faithfully follow the system of Burt's analysis, which is basically identical to that of Peter Rosenbaum's (1967). Notice that unlike Rosenbaum's analysis, more recently, G. Lakoff (1967) has shown that the process actually takes place in one step; the subject of the subordinate clause is turned into the subject of *seem*, and the predicate of that clause is simultaneously made part of the main predicate.

2. Number agreement applied

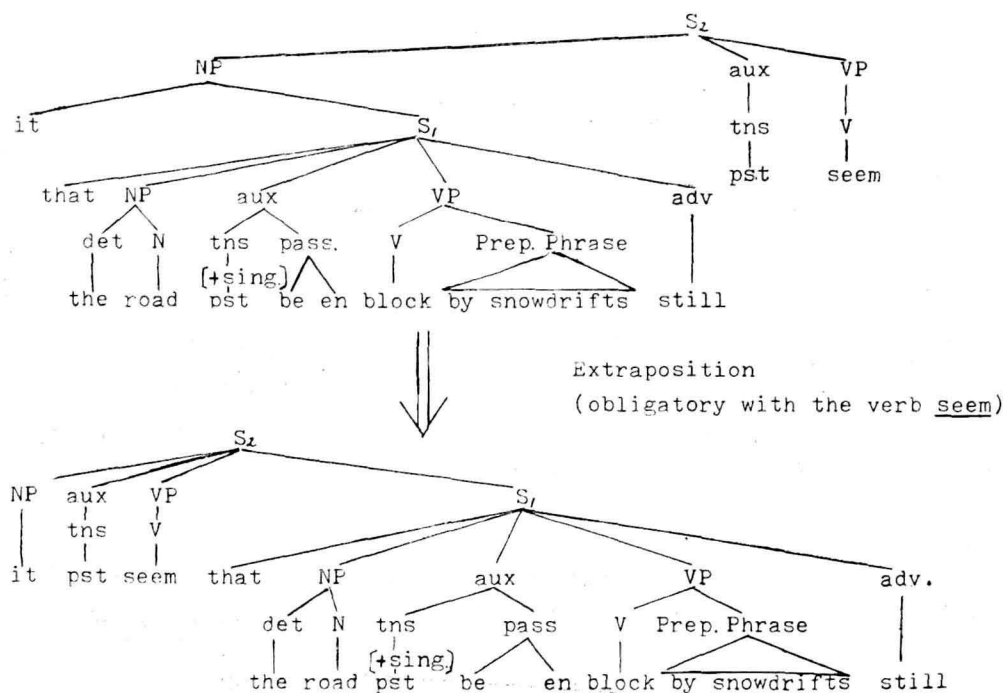
3. Complementizer placement should be applied. We will choose a *that* complementizer on S_1 .4. After applying affix hopping and adverb movement on S_1 , we get
that the road was still blocked by snowdrifts

5. Now let us try applying the *it*-replacement rule to S_2 on the tree-diagram just above and see what sentence will be yielded.

*The road seemed that was still blocked by snowdrifts.

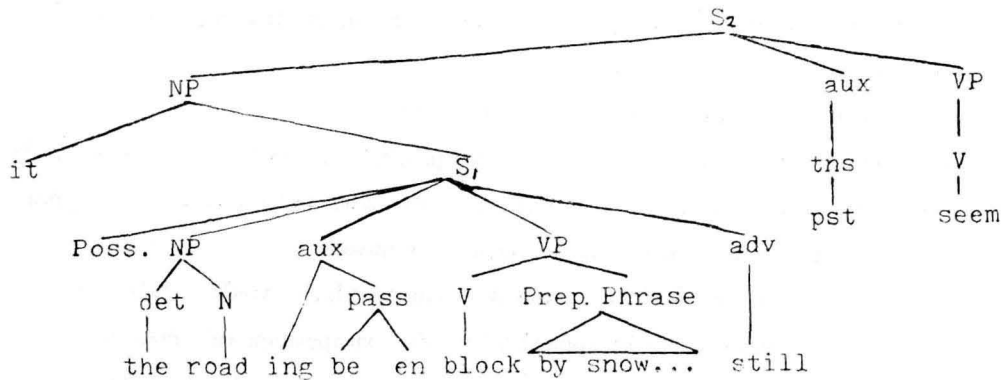
As *it*-replacement can not apply with a *that* complementizer, extraposition has to be applied, which is normally optional. But with the verb *seem*, extraposition is obligatory, otherwise we would eventually have the unacceptable sentence.

*That the road was still blocked by snowdrifts seemed, which would result after the *it*-deletion rule that is supposed to be applied when the extraposition rule does not apply. After extraposition and affix hopping have been applied to the S_2 cycle, the following will come out.



It seemed that the road was still blocked by snowdrifts.

Note that with extraposition, the lower S_1 is sister-adjoined to the VP of S_2 . As well-known to everyone, the complementizer placement rule, which never applies unless there is at least one sentence embedded in another, has the following three sorts of complementizers: *that*, *for-to*, and *poss-ing*. When applying complementizer placement to S_1 previously, we chose a *that* complementizer on S_1 . Now let us try applying *poss-ing* instead and see how it works.



On the S_2 cycle, suppose that we applied extraposition.

*It seemed the road's being still blocked by snowdrifts. Suppose, now, *it*-deletion be applied on the S_2 cycle, we would get *The road's being still blocked by snowdrifts seemed. You may say that the ungrammaticality of the two sentences above is due to the inanimate subject 'road' that can not take the possessive inflectional ending 's. Consider the following sentences whose subject is animate (person) respectively, which turn out to be unacceptable.

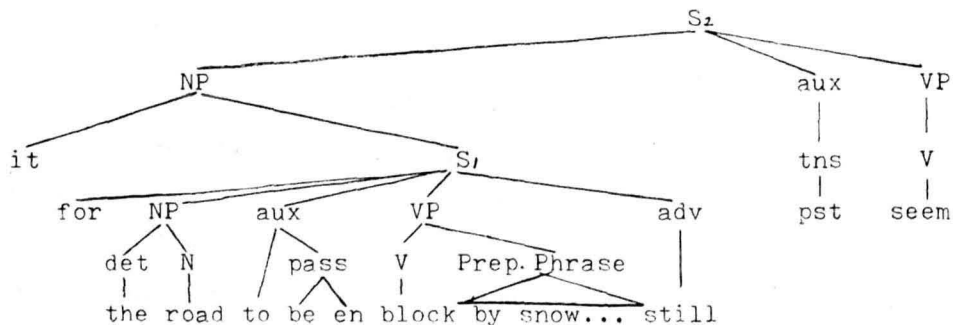
*It seemed John's being intelligent.

*John's being intelligent seemed.

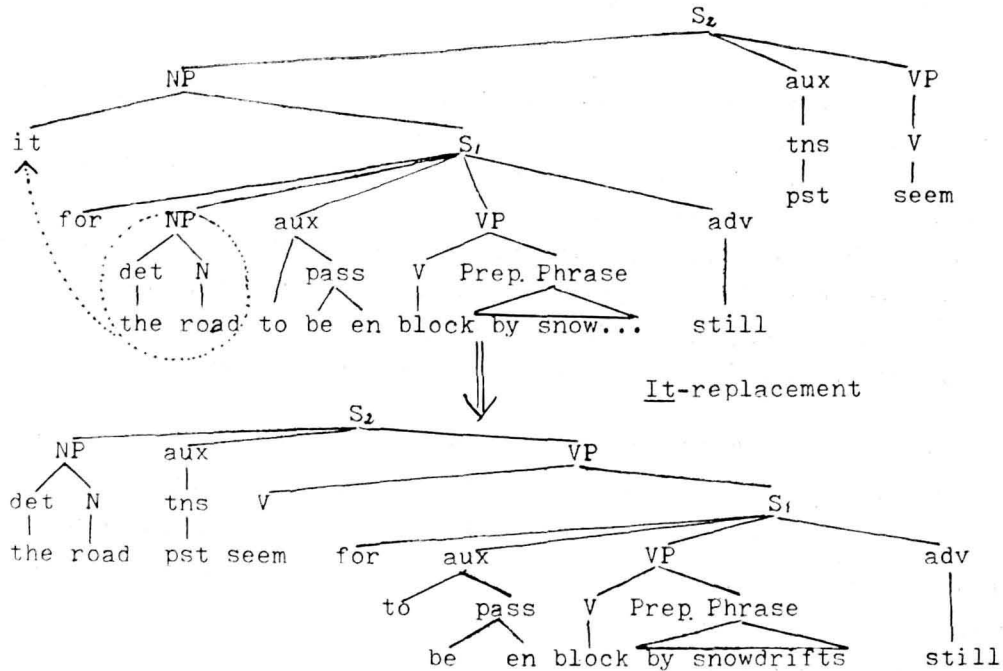
We can say, therefore, that no *poss-ing* complementizers can be used in the construction with the verb *seem*. Concerning other restrictions on the verb *seem*, Marina Burt has this to say (Burt 1971 : 172) :

The verb *seem* is restricted in that it cannot take *poss-ing* complementizers, e.g., *John's having arisen seem. Another restriction is that with *for-to* complementizers, extraposition does not apply with *seem*, e.g., *It seems for John to arise.

6. Now, in order that we may generate sentence (11), when applying the complementizer placement rule, let us choose *for-to* complementizers on S_1 after number agreement.



Equi-noun-deletion does not apply because there are no two identical NP's in S_2 and S_1 . How about applying extraposition with *for-to* complementizers? The outcome is, *It seemed for the road to be still blocked by snowdrifts. The only possible rule application with *for-to* complementizers will be *it*-replacement.



Note that with *it*-replacement, the lower S_1 becomes daughter-adjoined to the VP of the next higher S_2 . After affix hopping, adverb movement, and complementizer *for* deletion the sentence (11) will be yielded

(11) The road seemed to be still blocked by snowdrifts.

There is no agreement among the grammarians as to whether there is indeed any difference in nuance of meaning between sentences (I) and (11). E. Kruisinga tells us (Kruisinga 1925 : §2211) :

Sometimes there seems to be no difference at all; thus we might use a compound sentence opening with *It seems (to me)* instead of the personal construction in the two following sentences.

I seem to see something, she said. Bennett, *Anna*.

I seem to know these fields again; I am sure I have seen that elm before.

Sweet, *Element*, no. 65.

Similarly we can say *It happened that he came* or *He happened to come*; *He is confident that he will be successful* or *He is confident of success*.

H. Poutsma, on the contrary, has quite a different view (Poutsma 1928 : Part II, Section II, 6f.):

In passing it may be observed that the expanded and the contracted construction are not always identical in meaning, as they are in the above pair of examples. Thus there is an appreciable difference in meaning between *It seemed that she had little cause for anxiety* (Mac., *Fred.*, 665 b) and the corresponding contracted form *She seemed to have little cause for anxiety*. The latter implies that the phenomena giving rise to the statement have been observed in the person referred to, the former that they have been perceived in fact lying outside this person. The former denies the existence of alarming symptoms, the latter does not; the former is objective, the latter subjective.

Here some of you might raise the following question: if both sentences (1) and (11) derive from the same deep structure, must any difference in meaning (if ever any, between them) come from the transformations involved? Needless to say, transformation, in principle, does not change the meaning of sentence. There are many different views current on the nature of deep structure or 'the deep level'. The following view of D.T. Langendoen's may be among the popular ones (Langendoen 1969 : 14 and 142f) :

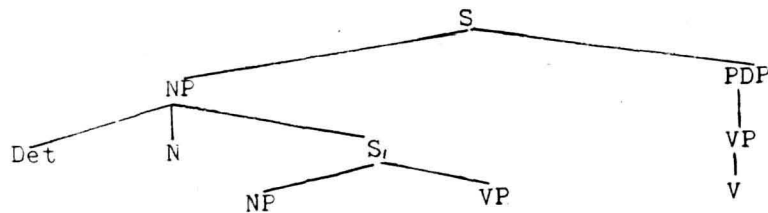
There seem to be two levels at which certain sentences, at least, are represented: a SURFACE LEVEL corresponding to overt, physical form of such sentences, and a DEEP LEVEL at which relationships hold which need not hold at the surface level. In the case of ambiguous sentences,..., we may suppose that each interpretation represents a unique set of relationships on the deep level, all of which correspond to a particular representation at the surface level.

The meaning of a sentence is represented in terms of a structure provided by constituent-structure rules having the form of rules of symbolic logic. This structure, which is called the deep structure of that sentence, is transformed by syntactic rules into a structure which is ultimately spoken or written, called its surface structure.

I would like to make it clear that we are concerned with any differences in nuance of meaning between sentences (1) and (11), not concerned with any difference in cognitive meaning between them. Sentences (1) and (11) might as well be defined as stylistic

variants of one sentence, because one is the paraphrase of the other. Returning to the problem as to whether there is any difference in nuance of meaning between them, my opinion is rather inclined to H. Poutsma's viewpoint, because I believe that every sentence structure (at a surface level) has its own nuance of meaning mirrored from the structure, however slight it may be.

Verbs such as *seem*, *appear*, *happen*, *chance*, and *turn out* all belong to the same category of verbs which are, according to P. Rosenbaum, defined as a class of intransitive verbs taking subject complementation. Its deep structure is exemplified by the phrase structure diagram below (Rosenbaum 1967 : 71) :



The restrictions imposed on the verb *seem* which have been described so far and other characteristic features of *seem* in the syntactic structure are generally parallel, though there are some minor points in discrepancy among them,⁵ to those of the other subject complementation for intransitive verbs (e.g., *appear*, *happen*, *chance*, and *turn out*.)

Just observe A.S. Hornby's following description of a usage of English verbs *happen* and *chance* (Hornby 1954 : 62 and 80) :

Happen and *chance* are also impersonal verbs in this pattern, equivalent to the adverb phrase *by chance*. Note the alternative constructions in which *chance* and *happen* are used in VP 25 D. See §36d, Table No. 67.

6. It happened that I was out of London at the time.

⁵ For example, the *to-be*-deletion transformation is optionally applicable when the main verb is *seem*, *appear*, and *turn out*, but not when it is *happen* or *chance*.

John seems to be tired. John seems tired.

John turned out to be a successful candidate.

John turned out a successful candidate.

John happens to be extremely intelligent.

*John happens extremely intelligent.

We chanced to be out when John called.

*We chanced out when John called.

I happened to be out of London at the time.

7. It chanced that we were out when she called.

We chanced to be out when she called.

§ 36 d. In this table the infinitive is in most cases more important than the finite verb.

1. We happened to be there.

We were there by chance (by accident).

2. I chanced to meet him in the park.

I met him by chance in the park.

With regard to the peculiarity of syntactic behavior of these verbs, Erica García aptly makes the following remark:

Sentences containing these verbs (i.e. *seem*, *appear*, *happen*, etc.) are quite clearly to be derived from underlying strings in which clauses appear as their subjects; they are then transformationally inserted into these as the superficial main verb. Thus *John happened to come* is generated from the base string which underlies *It happened that John came*; and *John happened to eat the cake* and *The cake happened to be eaten by John* are related to the basic forms underlying *It happened that John ate the cake* vs. *It happened that the cake was eaten by John*, respectively.

The fact that *happen* is transformationally inserted into its subordinate clause, like other verbs of its class, explains at once the lack of selectional restrictions characteristic of these verbs, their neutrality to the passive, and their ability to combine indefinitely in such strings as *John appeared to happen to fail to know the lesson*. Once again, we find that the verbs in this class are not absolutely uniform in their syntactic behavior: *happen*, *appear*, *seem*, *turn out*, etc. all occur in the frame It _____ that _____. *Fail*, however, does not. It must obligatorily be incorporated into its subject clause.⁶

Here I would like to point it out to you that despite the apparent identity of outward forms, there are remarkable differences in syntactic behavior of the verbs in this group, according to the sentence patterns which these verbs appear in. Just observe the following pairs of sentences.

- (12) a. It happened that I was present at the party.
- b. I was present at the party, it happened.
- c. *That I was present at the party happened.
- d. *What happened was that I was present at the party.
- e. I happened to be present at the party.

⁶ García, Erica C. 1967, Auxiliaries and the criterion of simplicity. *Lg.* 43, 867 f.

- f. I was present at the party, by chance.
 - g. *It was happening that I was present at the party.
- (13)
- a. It happened that negroes wanted to be treated like men.
 - b. *Negroes wanted to be treated like men, it happened.
 - c. That negroes wanted to be treated like men happened.
 - d. What happened was that negroes wanted to be treated like men.
 - e. *Negroes happened to want to be treated like men.
 - f. *Negroes wanted to be treated like men, by chance.
 - g. ??It was happening that negroes wanted to be treated like men.
- (14)
- a. It seems that the road is blocked by snowdrifts.
 - b. The road is blocked by snowdrifts, it seems.
 - c. *That the road is blocked by snowdrifts seems.
 - d. *What seems is that the road is blocked by snowdrifts.
 - e. The road seems to be blocked by snowdrifts.
 - f. Seemingly, the road is blocked by snowdrifts.
 - g. *It is seeming that the road is blocked by snowdrifts.
- (15)
- a. It may seem arrogant that I should not have been respectful to the teacher.
 - b. *I should not have been respectful to the teacher, it may seem arrogant.
 - c. That I should not have been respectful to the teacher may seem arrogant.
 - d. What may seem arrogant is that I should not have been respectful to the teacher.
 - e. *I may seem arrogant to have not been respectful to the teacher.
 - f. *Seemingly arrogant I should not have been respectful to the teacher.
 - g. *It may be seeming arrogant that I should not have been respectful to the teacher.
- (16)
- a. It appears that John enjoyed the concert.
 - b. John enjoyed the concert, it appears.
 - c. *That John enjoyed the concert appears.
 - d. *What appears is that John enjoyed the concert.
 - e. John appears to have enjoyed the concert.
 - f. Apparently, John enjoyed the concert.
 - g. *It is appearing that John enjoyed the concert.
- (17)
- a. It appears unlikely that we shall arrive in time.
 - b. *We shall arrive in time, it appears unlikely.
 - c. That we shall arrive in time appears unlikely.

- d. What appears unlikely is that we shall arrive in time.
 e. *We appear unlikely to arrive in time.
 f. *Apparently unlikely we shall arrive in time.
 g. *It is appearing unlikely that we shall arrive in time.
- (18) a. It turned out that the defendant was not guilty.
 b. The defendant was not guilty, it turned out.
 c. *That the defendant was not guilty turned out.
 d. What turned out was that the defendant was not guilty.
 e. The defendant turned out not to be guilty.
 f. ?Actually the defendant was not guilty.
 g. It was turning out that the defendant was not guilty.

Now look at the following chart which epitomizes the syntactic behavior of each verb in sentences (12)~(18)

transformations \ sentences							
	12	13	14	15	16	17	18
a. extraposition	0	0	0	0	0	0	0
b. down-grading	0	*	0	*	0	*	0
c. <i>it</i> -deletion	*	0	*	0	*	0	*
d. pseudo-cleft	*	0	*	0	*	0	0
e. <i>it</i> -replacement	0	*	0	*	0	*	0
f. sentence adverbialization	0	*	0	*	0	*	?
g. progressive tense formation	*	??	*	*	*	*	0

The mark 0 denotes 'applicable', the mark * 'inapplicable' and the mark ? 'dubious', respectively.

Examples above tell us that it is necessary to set up at least two lexical items of the verbs in this group (except *turn out*). For instance, the verb *happen* in sentence (12) is totally different from the verb *happen* in sentence (13) syntactically and semantically. The latter is synonymous with 'occur' but the former is not. I would like to make it clear that the verbs that I am going to deal with in this paper are the ones in sentences (12), (14), (16), and (18).

Now, let us consider the ordering of transformations for constructions related to these verbs. Concerning the sentence adverbialization rule, I would like you to take into close consideration Poutsma's following explanation (Poutsma 1928: Part II, Section II, 6):

Also the verbs *to seem* and *to appear* are mostly included among the copulas. These verbs, however, although no doubt effecting the connexion between the subject and the

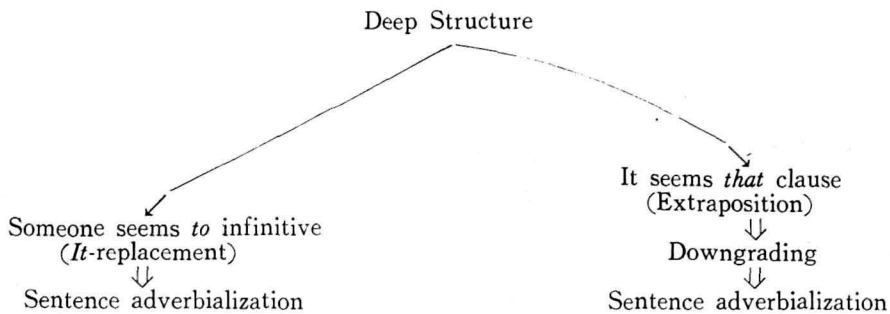
nominal, express a purely adverbial notion, indicating as they do certain attitudes of uncertainty on the part of the speaker with regard to the predication. The fact is that in such a sentence as *He seems (or appears) happy* the meaningless *to be* may be assumed to be understood: it is, indeed, oftener than not added to the verb, the above sentence becoming *He seems (or appears) to be happy*.

If H. Poutsma is right here, I think there might be some relationship between constructions with verbs *seem* and *appear* and the sentence adverbialization rule. As already mentioned. A.S. Hornby's view that certain verbs used before infinitives, such as *seem* and *appear* are really weaker in meaning than the idea expressed by the infinitives, is strengthened by Jespersen's treatment of such verbs as *hesitate*, *please*, *fail*, *seem*, and *appear*, as "verbs of comparatively vague meanings" (Jespersen 1940: 17. 3(6)).⁷ The table of the ordering of transformational rules involved will throw some light on processes of derivations in related constructions.

Deep Structure

1. Extraposition.	not applicable	It seems <i>that</i> clause
2. <i>It</i> -deletion.	not applicable	not applicable
3. <i>It</i> -replacement.	Someone seems <i>to-inf</i> .	not applicable
4. Downgrading.	not applicable	applicable
5. Sentence Adv.	applicable	applicable
	contracted construction	expanded construction

Put differently,



As I have no clear idea whether this ordering of rules is correct or not, I think this problem should be carefully studied in the future.

⁷ Note the following statement from Palm, F.R. 1965.161.

There are a number of verbs which might be described as 'adverbial' or as verbs of 'manner' in that they could be replaced by an adverbial phrase and the second verb used in a finite form:... Verbs used in this pattern are *appear*, *chance*, *come*, *happen*, *hasten*, *manage*, *proceed*, *seem*, *tend*, negatively *fail*, *neglect*, *omit*.

Let us examine the following pairs of sentences and try to find out some constraints on rule applications to these verbs.

- (19) a. It appears that John is intelligent.
 b. John is intelligent, it appears.
 c. John appears (to be) intelligent.
 d. Apparently, John is intelligent.
 e. John is intelligent, apparently.
- (20) a. It { $\begin{smallmatrix} \text{happened} \\ \text{chanced} \end{smallmatrix}$ } that I had no money with me then.
 b. I had no money with me then, it { $\begin{smallmatrix} \text{happened.} \\ \text{chanced.} \end{smallmatrix}$ }
 c. I { $\begin{smallmatrix} \text{happened} \\ \text{chanced} \end{smallmatrix}$ } to have no money with me then.
 d. By chance I had no money with me then.
 f. I had no money with me then, by chance.
 e. ? I had no money, by chance, with me then.
 g. It happened that I thought of it.
 h. I happened to think of it.
 i. ? I thought of it by chance.
- (21) a. It turned out that the beggar was a thief.
 b. The beggar was a thief, it turned out.
 c. The beggar turned out (to be) a thief.
 d. { $\begin{smallmatrix} \text{Actually} \\ \text{In fact} \end{smallmatrix}$ } the beggar was a thief.
 e. *Eventually, the beggar was a thief.
 f. *The beggar was a thief, eventually.

The trouble is that the sentence adverbialization rule does not always work satisfactorily with verbs *happen* and *chance*, as shown by sentences (20) e. and i, even though A. Hornby asserts that the rule works. What is worse, with the verb *turn out*, as indicated by sentences (21) e. and f, the sentence adverbialization rule rarely works, yielding no (even if, very minimally) acceptable derived sentences. Judging from these points, we can safely say that the sentence adverbialization rule is very weak as a rule. I admit that I cannot, for the present, back up strong syntactic pieces of evidence to support the validity of the rule.

But I would like to point out the fact that these verbs are not allowed to be used, in

the constructions so far discussed, in the so-called progressive tense form, which is quite obvious by simply observing the following.

(1') *It was seeming that the road was still blocked by snowdrifts.

(11') *The road was seeming to be still blocked by snowdrifts.

(19') a. *It is appearing that John is intelligent.

(19') c. *John is appearing (to be) intelligent.

(20') a. *It was { $\begin{smallmatrix} \text{happening} \\ \text{chancing} \end{smallmatrix}$ } that I had no money with me then.

(20') c. *I was { $\begin{smallmatrix} \text{happening} \\ \text{chancing} \end{smallmatrix}$ } to have no money with me then.

(20') g. *It was happening that I thought of it.

(20') h. *I was happening to think of it.

But, with the verb *turn out*, this constraint does not apply.

(21) a. It turned out that the beggar was a thief.

(21') a. It was turning out that the beggar was a thief.

(21) c. The beggar turned out (to be) a thief.

(21') c. The beggar was turning out (to be) a thief.

It was turning out that the beggar was breaking into a house.

Judging from these examples, it seems to me that there is a close relationship between the applicability of the sentence adverbialization rule and the constraint on progressive tense formation. In other words, if the former is applicable, the latter holds good, too. Hence, the fact that with the verb *turn out* neither sentence adverbialization nor constraint on progressive tense formation is applicable might constitute a piece of syntactic evidence for the sentence adverbialization rule. As shown above, it can be inferred that the application of the latter is limited only to such verbs as *seem*, *appear*, *happen*, and *chance*, which are not allowed to be used in the progressive tense form.

Returning to the syntactic behavior of the verbs *seem* and *appear*, we find that they are so similar in usage and meaning to each other that they are often used interchangeably with no distortion of meaning.

(22) a. Her old black dress that had seemed almost smart for the St. Dreot funeral now appeared most desperately shabby. (Jespersen)

b. He seemed so much older than his years as Dodo appeared younger than hers.

Benson D. 2. 47.

- c. What appears (to be) easy to the teacher often seems (to be) difficult to his pupils.

But, what is more peculiar about this group of verbs is that several of these verbs are found in one sentence, **as** in

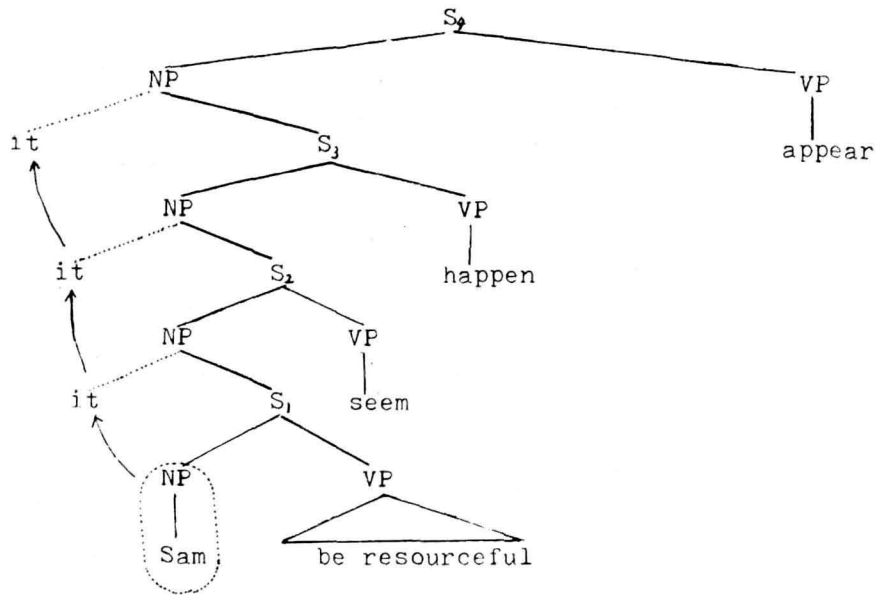
- (23) a. Sam appeared to happen to know the question.
 b. Sam appears to have happened to seem to be resourceful.
 c. The one that seemed most likely to turn out to be a friend was anxious to go.
 d. Sam seems to have happened to turn out to be a rascal.
 e. I should have been proud to be an American if it has happened that way; but as it didn't happen to happen I am prouder to be what I am. (Kruisinga)
 f. It (i.e. my falling in love) just happened to happen to me.

In sentence (23)f, which is a line from a popular song, the first *happen* (in the form of "happened") is "incomplete" in sense, and the second *happen* (in the infinitive form) is "complete" in the sense of befalling or occurring. The same holds good in sentence (23)e. With regard to the peculiarity of syntactic structures of these verbs, Erica García aptly draws the following conclusion:

These verbs (*happen*, *seem*, and *appear*) closely resemble the aspectuals (*begin*, *keep*, etc.) in their lack of restrictions, their indifference to the passive, and their ability to combine indefinitely. Thus we find that for any English sentence whatever, there is a counterpart that contains *happen*: e.g. *John is from Boston* ~ *John happens to be from Boston*; *John knew the answer* ~ *John happened to know the answer*, etc. That *happen*, *seem*, *appear* are neutral to the passive is shown by the following pairs, where active and passive have the same truth value: *John happened to read the book* vs. *The book happened to be read by John*; *Tom appears to like girls* vs. *Girls appear to be liked by Tom*, etc. Finally, we can have several of these verbs in one sentence, as in *John appeared to happen to seem to be clever*.⁸

Thus, we come to know that verbs such as *seem*, *appear*, *happen*, *chance* and *turn out*, etc. are allowed to combine indefinitely in one sentence, which is certainly awkward or unnatural, as in (23).b. Sam appears to have happened to seem to be resourceful. The following is a very rough tree-diagram of the deep structure of sentence (23)b.

⁸ García, Erica C. 1967, *ibid*.



On the S_2 cycle, *for-to* complementizer placement and *it*-replacement rules should be applied in that order, yielding "For Sam to be resourceful" and "Sam seemed to be resourceful." *For-to* complementizer placement and *it*-replacement are cyclically applied on S_3 level, thus producing "Sam happened to seem to be resourceful." On the S_4 cycle, let us apply the extraposition rule, generating

(24) a. It appears that Sam happened to seem to be resourceful.

On the S_4 cycle, supposing we applied *it*-replacement instead,

(23) b. Sam appears to have happened to seem to be resourceful.

will be yielded.

If we apply the downgrading rule to sentence (24) a, the following (24) c. will come out.

(24) c. Sam happened to seem to be resourceful, *it appears*. \Rightarrow Sentence adverbialization

(24) d. Apparently, Sam *happened to* seem to be resourceful. \Rightarrow Sentence adverbialization again

(24) e. Apparently, by chance, Sam *seemed to* be resourceful. \Rightarrow Sentence adverbialization a third time

(24) f.? Apparently, by chance, Sam is, seemingly, resourceful.

Judging from sentences (24)a.~f., which have been derived through a series of applica-

tion of transformational rules, it is theoretically possible to apply rules indefinitely, as far as the feeding rule is available,⁹ but it seems to me that the more modal sentence adverbs a sentence contains, the more awkward it looks or sounds, and the less it becomes acceptable as a sentence. That is to say, the more times a sentence undergoes applying the same transformational rule, the less natural it looks, and the less acceptable it becomes as a sentence.¹⁰ This tells us a reason why sentence (23)b. is a bit more awkward than sentence (24) a: the former undergoes applying more 'it-replacement' rule(three times) than the latter does (twice).

But if we notice the distinction between grammaticality and acceptability, some of you might feel this is a minor problem—a case of being a little too subtle a distinction. Anyhow I am not in a position to endorse this statement with convincing theory and rule.

In the constructions of *it seems/appears*, we easily recognize two kinds of semantic interpretation; that is the difference between an entailment predicate and a non-entailment one, which is proposed in the *It seems* squib by Robert Wilkinson. For the reader's convenience, I quote here some portions of the squib.¹¹

Definition: an *entailment predicate* is a predicate which entails (not presupposes) the truth of its complement. Examples of entailment predicates are *turn out*, *is true*, and *happen*.

Most entailment predicates entail the truth of their complements no matter what tense they are in. Thus consider:

- (1) It turns out that Lucille bought a cow.
- (2) It turned out that Lucille bought a cow.
- (3) It will turn out that Lucille will buy a cow.
- (4) It will turn out that Mike is sick.

Seem is hard to fit into the entailment predicate paradigm. First, *seem* does satisfy the criterion of complement preposability. Consider:

- (10) It seems that Harry won again.

⁹ Kiparsky, Paul 1968. Linguistic Universals and Linguistic Change, in E. Bach & R. Harms (eds.), *Universals in linguistic theory*, 196-200. N.Y.: Holt.

¹⁰ Refer to the footnote in page 66 of Langendoen, D.T. 1969. *The study of syntax*. New York: Holt. The reason for the awkwardness of 5.30 probably has to do with the presence of a sequence of infinitives. Even sentences in which the sequence is unavoidable (because *to-be* deletion is inapplicable) are stylistically awkward, for example:

Everyone wants to be sure to be present at the inauguration.

¹¹ Wilkinson, Robert. 1971. *It Seems*. *Linguistic inquiry*. vol. 2. no. 4. 558-9.

(11) Harry won again, it seems.

With regard to the defining characteristic of entailment predicates, entailment of the truth of the complement, *seem* and *appear* show peculiar behavior. *Seem* in the present tense without an indirect object is indifferently entailment or nonentailment:

(12) It seems that he's inside brewing something.

Let us compare his sentences (13) and (14).

(13) *It seems that he's inside brewing something*, but he really isn't. (Italics are mine)

(14) He's inside brewing something, it seems.

It is true that while the italicized part of sentence (13) is a non-entailment sentence, sentence (14) contains an entailment predicate. So far he is quite right in his exposition but I have doubt as to the following statement of his:

Seem in any other tense (i. e. except in the present tense) is only nonentailment, however. Thus consider:

(15) It seemed that John was making a pie.

(16) It has often seemed that Harry enjoys milk.

(17) It will seem that Mike is sick.

For example, no contradiction is ever possible if *but he really wasn't* is appended to (15).

Robert Wilkinson asserts that sentences (15), (16), and (17) have only nonentailment predicate *seem* in them, but my view is that sentences (15), (16), and (17) may also have an entailment predicate *seem* respectively, because it does not incur any contradiction even if we generate the following sentences.

(25) a. It seemed that John was making a pie, and he really was.

b. It seemed that John was making a pie, but he really wasn't.

c. It has often seemed that Harry enjoys milk, and he really does.

d. It has often seemed that Harry enjoys milk, but he really doesn't.

e. It will seem to you that Mike is sick, and he really is.

f. It will seem to you that Mike is sick, but he really isn't.

Nearly all native speakers of English with whom I consulted about the acceptability of the sentences above, accepted all sentences in (25) as good and understandable.

Let me cite another example from a literary work.

(26) He seemed very much astonished at the outward appearance of Mr. Squeers, as indeed he was. (Jespersen)

Sentence (26) might be transformed into sentence (27) by applying the extraposition rule.

- (27) It seemed that he was very much astonished at the outward appearance of Mr. Squeers, as indeed he was.

And notice that R. Wilkinson also maintains that

(19) with past tense complement and present tense *seems*, contrasts with (15) in having a possible entailment reading:

- (19) It seems that John was making a pie.

Similar examples are often found in literary works or in everyday speech. Let me quote a few examples from works of S. Maugham.

- (28) a. It seems that the girl lost all her near kin and she lived now in the house of distant cousins.
 b. It appears that Red was the most comely thing you ever saw.
 c. It appears that your wife sent a letter to Hammond asking him to come to the bungalow.

From this evidence, I propose that Wilkinson's contention that *seem* in any other tense (i. e. except in the present tense) is only nonentailment should be rewritten as follows:

Seem, followed by no indirect object, is indifferently entailment predicate or nonentailment, with no limitations on tense form. Whether the verb *seem* (possibly the verb *appear*, too) is an entailment predicate or not depends on the context, but as shown in sentences (28) with *seem* and *appear* in the present tense and followed by no indirect object, they seem more likely to be entailment predicates. Wilkinson's assertion that an indirect object added to the verb *seem* or *appear*, when these verbs are in the present tense form, destroys the entailment reading is rather shaky, I think, especially when the indirect is 'to me', with special reference to the nature of verbs *seem* and *appear*, which fall under the category of 'private verbs' that are closely connected with the speaker himself. This is supported by the fact that when I asked some Americans to paraphrase the following

- (29) I shall act as seems best.

I got two kinds of paraphrases of sentence (29). One reading is

- (29) a. I shall act as it seems best to me.¹²

¹² See Bolinger, Dwight. 1968. Aspects of language. 269 f.

...Here also belong the verbs *seem* and *appear*, which pair with *infer*, *see*, and so on, and with which the inactive subject is often personal: *Smith seems to offer only three explanations*, a common

The other response is

- (29) b. I shall act as it seems best.

Observe the following examples from works of S. Maugham.

- (30) a. I can't really. It doesn't particularly shock me. It just *seems to me very unnatural*...
I can't throw myself into the state of feeling in which such a thing *seems possible*.
b. That was very easy to understand; but what *seemed to me stranger* was that the girl was *apparently* in love with him.
c. And it *seemed to me* that the dingy cabin was transfigured and now it *seemed a fit and proper scene* for such an extremity of passion.

Of course, there is a slight difference in nuance of meaning between *It seems/appears* and *It seems/appears to me*; the former roughly means that 'it seems (to me and other people will also agree)' and the latter, 'it seems to me, (but I don't know fully)', but I do not always think that *seem* and *appear* automatically become nonentailment predicates when they are followed by 'to me'. But notice that an indirect object appended to *seem* or *appear* prevents us from applying the sentence adverbialization rule and also, in nearly all cases, from regarding these verbs as entailment predicates.

- (31) a. She was very pale, but dry-eyed. *To the doctor* she seemed unnaturally composed.
b. He waited. *To himself* he seemed to wait a very long time.
c. "This must seem like home *to you*," said Dr. Macphail, with his thin, difficult smile.
d. It may seem strange *to persons* who live in a highly civilized state that she should confide these intimate things to a stranger; it did not seem strange *to me*.

To conclude, I agree, with some modifications mentioned above, with R. Wilkinson's argument that there are two lexical items *seem*, one being entailment (presumably formally stated by a marking on the verb) and not subcategorized as taking objects and the other nonentailment and subcategorized as taking objects.

Because we have two kinds of predicates (i. e. entailment and nonentailment) in verbs *seem* and *appear*, ambiguity inevitably comes about in meaning of the sentence adverbials *seemingly* and *apparently* as well as the adjectives *seeming* and *apparent*. Concerning this fact, Evans and Evans have this to say (Evans and Evans 1957: 38):

excuse given by reviewers of books that saves the trouble of re-reading and counting up to four. The forthright equivalent is *As far as I have taken the trouble to see, Smith offers only three explanations*.

The difficulty with *apparent* is that it has two meanings. It can mean capable of being clearly seen or understood and it can mean seeming (as opposed to real): *It is apparent that the apparent honesty of some criminals is their greatest asset.*

It is fully possible to rewrite the italicized sentence in the quotation just above as the following with no difference in cognitive meaning:

- (32) It appears (or seems) that apparent (or seeming) honesty of some criminals is their greatest asset.

Another interesting sentence adverbial is *evidently*, which has at least two meanings, that is to say, (1) 'manifestly,' and (2) 'seemingly/apparently.' Rudolf Flesch writes about this problem thus, (Flesch 1964:110):

evidently is very common, both in speech and in writing, but it's simpler and shorter to say *it seems, clearly or of course*:

Evidently (It seems that) the Hansons also have a gift, that of knowing what Cézanne confessed unwillingly only to himself.

The Prime Minister evidently (It seems that the Prime Minister, The Prime Minister of course) hoped to use this support for a "hard line" foreign policy to rally Australian behind his government...

Evidently, (Clearly,) paper work has become a national addiction, mostly of its victims incurably hooked.

As clearly known, *evidently* in the sentences (33) below all means 'it seems,' 'seemingly,' or 'as may be clearly inferred,' etc.

- (33) a. "Perhaps you've got the fever?" "I don't think so," I said amusedly, and I stretched out my hand for her to feel. "No, you haven't," she continued, *evidently* reassured. (Corelli)
- b. As the men were *evidently* looking for honey, I waited to watch their operations. One of them first produced a long piece of wood, *apparently* the stem of a small tree.
- c. 'Is he suitable for the post?'
'*Evidently.*' (It appears/Seemingly)

Quite puzzling is the fact about verbs in this category that, with *happen* and *chance*, although the meanings are nearly similar and often in casual speech they are used interchangeably, the verb *chance* has mysterious selections pertaining to tense and auxiliary,

which John R. Ross pointed out in the Chance squib.¹³

I chanced (*chance) to like Brussels sprouts.

Bill had (*has) chanced to write down the licence number.

*Bill seems to chance to meet her.

Bill seems to have chanced to meet her.

Let us confine ourselves to the tense constraint on *chance* right now. From the examples above, we notice that the verb *chance* is used neither in the present tense form, nor in the present perfect tense one. Compare the following pair of sentences.

- (34) a. Do you happen to remember the date of John's birthday?
 b. *Do you chance to remember the date of John's birthday?
 c. It frequently happens that he goes out with his hat on.
 d. *It frequently chanches that he goes out with his hat on.

Although the verb *happen* is surely a member of the class of fortuity verbs, an action or state expressed by *happen* has a feature of validity affecting for a long time, so that it might be taken as belonging to verbs of the resultative character, the effect of which can exercise over a considerable length of time. On the other hand, the verb *chance*, I think, belongs to the verb of a momentaneous nature, the actions denoted by which are those covering only one moment, or comprised between two closely contiguous moments, so that the beginning and the end practically synchronize. What is more remarkable, the verb *chance*, from the semantic interpretation 'happen by chance,' can be classified, in due fairness, as a verb of fortuity or unpredictable uncertainty. It is generally acknowledged that the present tense, including the present perfect tense form, functions to denote the action or state of verbs expressing a kind of habitual activity [or condition rather than that of the present tense only, stretching over rather long a range of time, with no regard to any specific point of time. So it stands to reason that with such a verb as *chance*, no sentences can be yielded in the present or present perfect tense form.

- (35) a. As it { happens / *chances }, I have left my money at home.
 b. Do you, by chance, remember our talk about animals?
 c. Are you wanting a lawn-mower by any chance? (Zandvoort)
 d. By the bye, Mr. Giles, have you, by any chance, heard anything lately of my

¹³ Ross, John. 1970. Chance. *Linguistic inquiry*. vol. 1. no. 2. 261.

child? Disr., *Loth.*, 1, ch. 1.

Sentences (35) above indicate to us that because of the constraint on the predicate 'chance to-infinitive' in the present or present perfect tense form, such expressions as *by chance*, and *by any chance* plus verb (i.e. the present tense or present perfect tense form respectively) should be used instead in order to avoid yielding unacceptable sentences in such tenses.

Now let us discuss the future tense of the verb *chance*.

*They will (shall, should) chance to meet John soon.

*We are supposed (or going) to chance to meet John soon.

*Will (or shall) you chance to meet John soon?

*If you shall (or will) chance to meet John soon, please tell him the news.

If you should (*would) chance to meet John soon, please tell him the news.

These instances show the fact that they forbid us to put *chance* in the future tense, either syntactically or semantically unless it cooccurs with the auxiliary *should* in an *if*-clause, which shows the speaker's uncertainty as to the events in the future. This constraint simply furnishes proof that *chance*, when used in the future tense, should be regarded as the verb of uncertainty about the probable event in the future on the part of the speaker. And just examine the following example:

(36) It was surprising / odd / funny, etc. that he should chance to meet you.

Sentence (36) tells us that it is not only in *if*-clauses that *should* can go with *chance*, though it was used in the past tense form. Anyhow what is definitely certain is that the construction with the verb *chance* is about the description of events or conditions in the past, not about that in both the present and the future tense.

In passing, a few remarks would be necessary on the position of adverbs in the 'it seems' construction. Let us consider the position of adverbs in the following examples.

(37) a. Feeling useless seems *generally* to be an unpleasant sensation. (Brown Standard Corpus)

b. I seemed *always* to live in a crowd. (S. Maugham)

c. *For an instant* she seemed to hesitate; then, with averted eyes, she leaned towards him. *-ibid.*

d. It *just* seems to me very unnatural. *-ibid.*

e. It *really* seemed as though they were under water longer than any men could breathe. *-ibid.*

- f. It *still* seemed to him the only thing that mattered.
- g. But it *soon* appeared that his commercial undertakings were not serious.
- h. *For a moment* it seemed that she could not utter a word.

What these examples above indicate to us can be roughly described as follows. The single-word adverb may be placed between the *it* and verbs *seem* and *appear* in the so-called expanded construction (d—g), whereas the contracted construction, especially with the pronominal subject used, very sparingly if ever, allows adverbials, irrespective of kinds of adverbials (except frequency adverbs), to be inserted between the subject and verbs in question, (a—c), though this does not apply with adverbs of frequency, as mentioned just now.

- (37) a'. Feeling useless *generally* seems to be an unpleasant sensation.
- b'. I *always* seemed to live in a crowd.
- c'. *She, *for an instant*, seemed to hesitate; then, with averted eyes, she leaned towards him.
- d'. *It *yesterday* seemed to me very unnatural.
- e'. *It *quickly* seemed as though they were under water longer than any men could breathe.
- f'. *It *here in Korea* seemed to him the only thing that mattered.
- g'. *But it *quietly and interestingly* appeared that his commercial undertakings were not serious.
- h'. *It *for a moment* seemed that she could not utter a word.

You probably assert that for instance, the ungrammaticality of sentence (37) c' does not lie with the verb *seemed*, and that it rather does owing to the fact that the adverbial *for an instant* cannot ever occur immediately after the subject of any sentence. But what I would maintain here is that the verb *seem* has got no close connection with the adverbial *for an instant*, which has evidently something to do with the verb *hesitate*. Moreover, the semantic interpretation of the verb *seem* seriously conflicts with the implication of the adverbial *for an instant*, which covers only a very short period of time. For this reason, the adverbial should not be placed just beside the verb *seem*, but be detached from it. The same holds true with the sentence (37) h'. Sentence (37) h and the following (37) h'' It seemed that she could not utter a word for a moment. are paraphrasable to each other and the former is yielded after the application of the adverb preposing rule to the latter. Roughly

speaking, adverbs (especially adverbs of more than one word) of place, time, and frequency optionally precede or follow the entire sentence, though there are some minor differences in nuance of meanings.

As a general rule, we usually have ambiguity in meaning of the sentence because of the position of adverbs, for example;

(38) John advised me secretly to go to the police.

One possible reading is

(38) a. John secretly advised me to go to the police.

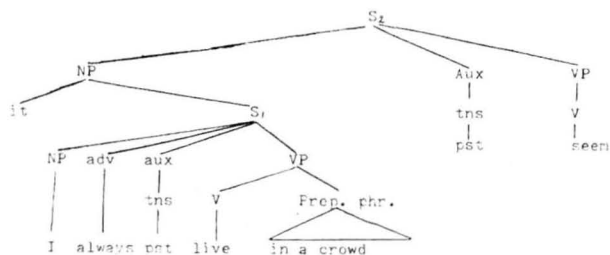
The other possible reading will be the following

(38) b. John advised me to go secretly to the police.

I admit the reading of (38) b is rather a weak one, but it is anyhow a possible reading. It is needless to say that this kind of ambiguity in meaning can be easily avoided by putting a comma (in writing) or a pause (in speech) either before the adverb *secretly* or after it in such a sentence as (38). Though the position of adverbs in sentences (37) a. and b. is somewhat similar to that of the adverb *secretly* in sentence (38) above, there is no ambiguity in meaning, owing to the position of adverbs, in sentences (37) a, b, and c, because in the deep structure of each sentence, the verb *seem* has nothing, directly, to do with the adverbs *generally*, *always*, and *for an instant*, which modify 'feeling useless...to be an unpleasant sensation,' 'I...to live in a crowd' and 'she...to hesitate' respectively. To make it more clearly understood, I will draw, very roughly, the deep structure of sentence (37)b. in a tree diagram.

The deep structure of the sentence (37) b.

I seemed always to live in a crowd.



The rules to be applied to this deep structure are

1. Complementizer placement *for-to* on S_1 .
2. *It*-replacement.
3. Complementizer *for* deletion.

After applying these transformational rules to the deep structure (of course, we omit mentioning minor rules, such as affix hopping, etc.), we get sentence (37) b. But in the case of sentence (37)c, one more transformational rule 'adverb preposing' should be applied after the complementizer *for* deletion rule. If we list major rules to be operated in order to yield sentence (37) c, they are

1. Complementizer placement *for-to* on S_1 .
2. *It*-replacement.
3. Complementizer *for* deletion.
4. Adverb preposing.

The reason why sentence (37) c. undergoes the application of the rule 'adverb preposing' is that the time adverb *for an instant* precedes just the similar sort of time adverb *then* in the stream of the speech. That is to say, in order not to produce the following awkward sentence (37) c'', in which we find the presence of a sequence of three adverbial expressions,¹⁰ even though there is a semicolon between the first adverbial and the second one, adverb preposing should be applied.

(37) c''. She seemed to hesitate *for an instant*; *then, with averted eyes*, she leaned towards him.

But there seem to be some constraints on the adverb preposing rule. For instance, while (39) a. can be converted into (39) b,

- (39) a. He seems to be busy today.
 b. Today he seems to be busy.

(39) c. cannot be converted into (39) d, unless the preposed adverb *next month* is contrastively stressed.

- (39) c. He seems to be busy next month.
 d. *^{*}Next ^{*}month he seems to be busy.
 cf. Next month he will seem to be busy.

To my great regret, I have no clear idea of this difference in preposability of adverbs fully, but it is certain that the rule application is, to some extent, restricted by the tense on the main verb as well as the kind of adverbial expressions. I just raise this problem to call your attention to it.

To return to the problem of the position of adverbs, let me discuss the so-called adverbs of frequency. We often find sentences in which frequency adverbs are placed, even in the

contracted construction with verbs *seem* and *appear*, etc., between the subject (mostly personal, animate subject) and the verbs. This may seem inconsistent with the examples of sentences (37) a. and b.

- (40) a. I *always* seem to get on better with the husband than with the wife. (U.E.D.)
 b. Scientists *often* turn out to be idiosyncratic, too. (Brown Standard Corpus)

How can we explain such a position of adverbs, although the verbs *seem* and *turn out*, in the deep structures of sentences (40) a. and b., have no direct connection with the adverbs *always* and *often*? My tentative solution is simple enough, because frequency adverbs, being mid-position adverbs in the pre-finite position (at the surface structure) are usually placed before the verb that is not one of the anomalous finites. The adverb in the embedded sentence S_1 will be shifted to the mid-position (that is, between the subject and the finite verb) of the output string by the transportability convention of adverbs.¹⁴ In other words, after the operation of rules of 'complementizer placement *for-to* on S_1 , 'it-replacement' and 'complementizer *for* deletion', a rule of adverb transporting to the mid-position is applied, instead of the adverb preposing rule because the adverbs in question are members of the class of frequency adverbs.

- (40) a'. I seem always to get on better with the husband than with the wife. \Rightarrow adverb transporting to the mid-position

- (40) a. I always seem to get on better with the husband than with the wife.

- (40) b'. ?? Scientists turn out to be often idiosyncratic, too. \Rightarrow adverb transporting to the mid-position

- (40) b. Scientists often turn out to be idiosyncratic, too.

I admit that my explanation for this phenomenon is not so convincing as to be strongly backed up with a rule.

II

In their paper 'FACT' (1968),¹⁵ the Kiparskys introduce to us the notion of factive and non-factive predicates that take sentences as their subjects or objects. They propose that many of differences in the form and meaning of nominalizations depend not on essentially

¹⁴ Keyser, Samuel J. 1968. Review of Adverbial positions in English, by S. Jacobson. Lg. 44. 368.

¹⁵ Kiparsky, Paul, and Carol Kiparsky. 1970. Fact. Recent progress in linguistics, eds. by M. Bierwisch and K.E. Heidolph, 143-173. The Hague: Mouton.

arbitrary syntactic features but rather on semantic features in the governing items. Factive predicates can only occur when the speaker presupposes that the sentential subject or object of the predicate is true, or factual; non-factive predicates occur when the speaker merely asserts or believes the predicate to be true, but does not presuppose its factuality. In this study, I will take up only predicates that take sentences as their subjects. According to the Kiparskys, such verbs as *seem*, *appear*, *happen*, *chance*, and *turn out* belong to non-factive predicates, the chief restrictions of which can be summarized as follows:

- (1) No non-factives allow *(the) fact that S* or *(the) fact of ~ing*:

*The fact that the dog barked during the night	}	seems to me.
*The fact of the dog's barking during the night		
The fact that the dog barked during the night	}	bothers me.
The fact of the dog's barking during the night		
- (2) No non-factives allow the full range of gerundive construction:

*His being found guilty seems to me.
His being found guilty suffices.
- (3) Most non-factives allow raising the subject of the constituent S to the subject of the matrix S (Rosenbaum's '*It*-replacement' has been used for this phenomenon in this paper), but none of the factives do:

It seems that there has been a snowstorm.
There seems to have been a snowstorm.
It is tragic that there has been a snowstorm.
*There is tragic to have been a snowstorm.
- (4) Extraposition is obligatory with sentential subjects of nonfactives, but optional with those of factives:

*That there are porcupines in our basement seems to me.
It seems to me that there are porcupines in our basement.
That there are porcupines in our basement makes sense to me.
It makes sense to me that there are porcupines in our basement.

Although there are many minor differences in syntactic property among the non-factive sentential predicates, the concept of factive/non-factive predicates goes a long way towards solving many problems in syntax.

The distinction between the factive predicates and the non-factive ones just parallels

the distinction between the evaluative adverbs and the modal adverbs that has been initiated by Peter A. Schreiber, which will be dealt briefly with later. I previously discussed in this paper the fact that in the 'it seems' construction and its related matters, there is a close relationship between the two transformations—downgrading and sentence-adverbialization. For the reader's convenience, I will cite a few examples.

- (41) a. It appeared that Howard enjoyed the concert.
 b. It appeared Howard enjoyed the concert.
 c. Howard, it appeared, enjoyed the concert.
 d. Howard enjoyed the concert, it appeared.
 e. Howard appeared to enjoy the concert.
 f. Howard apparently enjoyed the concert.
 g. Apparently Howard enjoyed the concert.
 h. Howard enjoyed the concert, apparently.
 i. *He, it appeared, enjoyed the concert.

The reason why sentence (41)i. is unacceptable is only the presence of a pronominal subject just before the down-graded clause. Compare sentence (41)c.

H. Poutsma repeatedly writes (Poutsma 1928: Part 2, Section 2, 37):

that the adverbial function is unmistakable in *to happen* and *to chance*. It can hardly fail to be observed in the modal verbs. Sometimes an adverbial verb and an adverbial adjunct belong to one and the same predicate. Thus:

Do you *happen to* have a knife *by chance*?

— Elinor Glyn, *Refl. of Ambros*, L, Ch. 7, 36.

Perhaps she *may* be his daughter, though he is not married. —C. Dickens, *Chuz.*, Ch. 1.

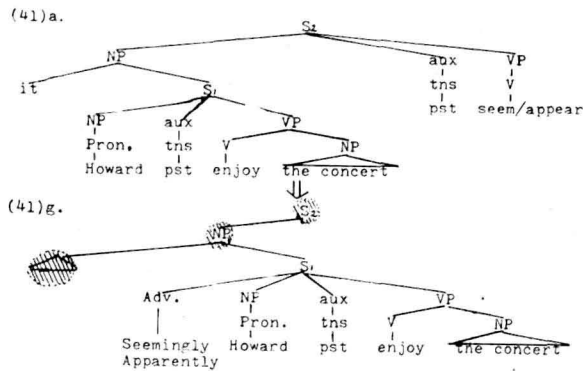
To all appearances the man *seemed* fit for the post.— *ibid.*

Poutsma also remarks as follows about adverbial elements of verbs of seeming and appearing (Poutsma 1928: Part 1, First Half, 4):

If it be asked why, contrary to ordinary practice, the verbs of seeming and appearing are not included among the copulas, the answer is that these verbs differ in an important respect from the real copulas and the verbs which may be considered to do duty as such. The fact is that they are, as regards their functions, on a par with modal verbs and adverbs, expressing as they do some attitude on the part of the speaker towards

the fulfilment of the action or state ascribed to the subject. They have this function irrespective of the nature of the predicates, whether the latter are connected with the meaningless *to be* or not; thus with equal distinctness in *He seems to know me* as in *He seems to be happy* or *He seems happy*. But in whatever connexion the verbs *to seem* and *to appear* are used, they, naturally, preserve their full meaning. This distinguishes them from the copulas and the verbs doing duty as such, whose outstanding feature is that their meaning is a more or less weakened reflex of that which they have in other functions. It will be admitted that, on these considerations, the above verbs (i.e. *seem* and *appear*) should not be included among the copulas.

We now know that the sentence adverb *apparently* in sentences (41) f, g, and h, respectively, is transformationally derived from the non-factive predicate *appear* or *seem* after applying the downgrading and the sentence adverbialization rules to the deep structure of sentence (41)a. It appeared (or seemed) that Howard enjoyed the concert. Now, observe a derivational process from sentence (41)a to sentence (41)g which might be roughly tree-diagrammed as follows.



The question, then, arises as to what class of sentence adverbial *apparently* and *seemingly* belong to.

To digress from the main concern for the time being, let me consider the problem of so-called 'sentence-modifying adverbs' in English. As far as I know, this term was first introduced to us by Henry Sweet with the following description (Sweet 1891 : 125):

As assertion, denial, etc., consists in stating a certain relation between the subject and predicate of a sentence, it follows that adverbs of assertion cannot modify either subject or predicate exclusively, but modify the relation between them, that is, modify the

general meaning of the sentence. Thus *certainly* in *I certainly think so* does not modify *think* alone, as if the sentence were equivalent to *I think with certainty* or *I think correctly*, but the whole sentence is equivalent to *it is certain that I think so*. That such is the meaning of the adverb is confirmed by the form of the sentence, for if *certainly* modified *think* only, it would follow it, as the adverb *so* does in *I think so*. Nor can it modify *I*, because adverbs precede the noun-words they modify. Lastly, the freedom with which *certainly* can be moved about in the sentence seems to show that it does not belong specially to any one word in it: *certainly I think so*, *I certainly think so*, *I think so certainly*.

Compare the following pairs of sentences and find out the meaning difference.

- (42) a. He *foolishly* killed the goose for the golden eggs.
 b. He acted *foolishly* in killing the goose.
 c. He *generally* failed to explain his meaning. (=as a rule)
 d. He failed to explain his meaning *generally*. (=only partially)

To return from the digression, sentence adverbials in English can be subdivided into several kinds like the following, mainly based on semantic consideration. That is, modal adverbials, evaluative adverbials, source adverbials, performative adverbials, transitional adverbials, viewpoint adverbials, and conjunctive sentence adverbials. I am now in no position to deal with all of them from syntactic evidence or from semantic interpretation in this paper and so I will only take up the difference between modal adverbials and evaluative ones. Let me quote some portions of Peter A. Schreiber's paper.¹⁶

There are characteristic differences in the semantic interpretation of sentences containing modal and evaluative adverbs. That is, while an evaluative adverb presupposes the positive truth-value of the (surface) predication with which it is in construction and offers an evaluation (value-judgment) of it, a modal adverb assigns a degree of likelihood (a probable truth-value) to the associated predication. In support of this distinction, compare (14) and (15):

- (14) a. Obviously, Thurmond is extracting his pound of flesh.
 b. Thurmond probably is extracting his pound of flesh.
 c. Thurmond is extracting his pound of flesh, possibly.
 (15) a. Regrettably, Thurmond is extracting his pound of flesh.
 b. Thurmond, unfortunately, is extracting his pound of flesh.
 c. Thurmond is extracting his pound of flesh, understandably.

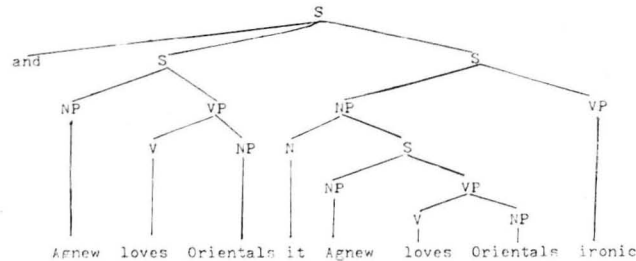
¹⁶ Schreiber, Peter A. 1971. Some constraints on the formation of English sentence adverbs. *Linguistic inquiry*, vol. II, no. 1.

In the sentences with evaluative adverbs, the associated predication is implicitly considered true, while this is not the case in the sentences with modal adverbs.

Schreiber's exposition clearly shows us that, judging from semantic interpretation, factive predicates are to non-factive ones exactly as evaluative adverbs are to modal adverbs. This will be more evident when we look at the tree-diagrams of deep structures of sentences with an evaluative adverb and with a modal adverb that, according to Schreiber, are crudely drawn as follows:

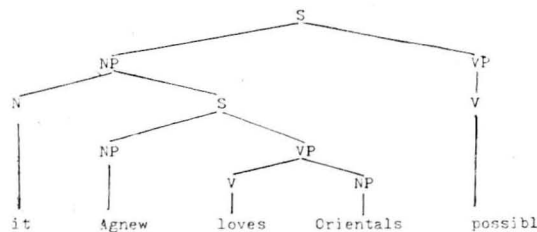
The presumed underlying structure of a sentence with an evaluative adverb consists of an independent predication (an assertion) and a conjoined comment upon that predication, roughly as in (35):

(35)



The underlying structure of a sentence with a modal adverb, on the other hand, consists of a predication that is the subject of a sentence whose predicate qualifies that subject (i.e. the predication with which the modal adverb is in construction—in the surface structure—is ultimately not an independent predication), roughly as in (36):

(36)



The comparison between the tree-diagrams of (35) and (36) and the tree-diagram of the deep structure of sentence (41)a. on page 109 obviously indicates that the deep structure of a sentence with the 'it seems, etc.' construction is identical to that of a sentence with a modal adverb, not that of a sentence with an evaluative adverb. Previously I raised the

question of what kind of sentence adverbial the adverbs *seemingly* and *apparently* belong to. From the viewpoint of semantic interpretation, we may assume that these adverbs belong to the category of modal adverbs, but we have to find out a reason for the argument in the syntactic structure, too, in order to make the argument stronger.

Among members of antonymous adjective pairs such as *probable* and *improbable*, *possible* and *impossible*, or *unquestionable* and *questionable*, we know from the following examples that the adjective form that assigns the higher degree of probability may undergo modal adverbialization.

The following pairs of sentences (43), (44), and (45) can be converted, with no distortion of cognitive meanings, into those sentences (43'), (44'), and (45') respectively, being as stylistic variants to one another.

- (43) a. It is probable that John will leave for Honolulu tomorrow.
 b. It is improbable that John will leave for Honolulu tomorrow.
 c. It is probable that John won't leave for Honolulu tomorrow.
- (44) a. It is possible that John left for Honolulu yesterday.
 b. It is impossible that John left for Honolulu yesterday.
 c. It is possible that John didn't leave for Honolulu yesterday.
- (45) a. It is conceivable that John went to New York early this morning.
 b. It is inconceivable that John went to New York early this morning.
 c. It is conceivable that John didn't go to New York early this morning.
- (43') a. Probably, John will leave for Honolulu tomorrow.
 b. *Improbably, John will leave for Honolulu tomorrow.
 c. Probably, John won't leave for Honolulu tomorrow.
- (44') a. John possibly left for Honolulu yesterday.
 b. *John impossibly left for Honolulu yesterday.
 c. John didn't possibly leave for Honolulu yesterday.
- (45') a. John conceivably went to New York early this morning.
 b. *John inconceivably went to New York early this morning.
 c. John didn't conceivably go to New York early this morning.

Now, let us find a cogent reason for the unacceptability of sentences (43')b, (44')b and (45')b, which are somewhat transformationally related to sentences (43)b, (44)b, and (45)b that are all grammatically acceptable. Adjectives *improbable* in sentence (43) b, *impossible* in sentence (44)b, and *inconceivable* in sentence (45)b, belong to a category of adjectives

that assign the lower degree of probability. It can be said that this kind of adjectives may not undergo modal adverbialization; that is to say, *improbably*, *impossibly*, and *inconceivably* can not be regarded as sentence adverbs at all, but as word-modifying adverbs.

Concerning peculiar properties of adverbs, Arnold M. Zwicky has this to say:

Usually in *The children are usually noisy* is a sentence adverbial, but *unusually* in *The children are unusually noisy* is a degree adverbial associated with *noisy*. The contrast is not a peculiarity of the pair *usually-unusually*, but is a property of a large class of positive-negative pairs: *typically-atypically*, *normally-abnormally*, *characterically-uncharacterically*, *possibly-impossibly*, *commonly-uncommonly*, *probably-improbably*, *naturally-unnaturally*, *ordinarily-extraordinarily*, etc.; even *generally* versus *particularly* and *especially*.¹⁷

Let us apply the modal adverbialization rule to the sentence of 'it seems' construction and see how it works out in the surface structure of the output string.

(46) a. It seems that your suggested solution is not workable.

b. Seemingly your suggested solution is not workable.

c. *Unseemingly your suggested solution is workable.

d. *Not seemingly your suggested solution is workable.

(47) a. It appears that John did not enjoy the movies.

b. John apparently did not enjoy the movies.

c. *John, { *unapparently*
 not apparently }, enjoyed the movies.

d. Apparently John didn't enjoy the movies.

No sentences containing such modal adverbs as not only *improbably*, *impossibly*, *inconceivably*, and *questionably*, etc. but also (?nonce) adverbs *unseemingly*, *unapparently*, and *not seemingly*, etc. can ever be regarded as grammatical and acceptable. This demonstrates that all these adverbs of lower degree of probability (i. e. having +Affect feature)¹⁸ have the syntactic constraint that these adverbs cannot be used as sentence modal adverbs in any sentence, because they pertain to the category of word-modifying adverbs.

We now realize that the constraint which the modal adverbs *probably*, *possibly*, *conceivably*, and *unquestionably*, etc. internally have is also applicable to adverbs *seemingly* and *apparently*. This means they all belong to the same subclass of sentence adverbials—modal adverbs,

¹⁷ Zwicky, Arnold M. 1970. *Usually* and *Unusually*. *Linguistic inquiry*. vol. 1. no. 1. 145.

¹⁸ Klima, E.S. 1964. Negation in English. *The structure of language*, ed. by J.A. Fordor and J.J. Katz, 311-315. Englewood Cliffs, N.J.: Prentice-Hall.

judging not only from semantic interpretation but from the angle of syntactic behavior. There are some counter arguments to the effect that such adverbs as *fast* and *reluctantly*, which obviously are not sentence adverbs, are not allowed to co-occur with negatives, giving such examples as **not fast did he run*, and **not reluctantly did he run*, and **He ran not fast/reluctantly*. But we easily recognize that there must be some syntactic distinction between *seemingly* and *apparently*, etc. and *reluctantly* and *fast*, etc. by simply observing the following instances.

- (48) a. John helped me with my work (very) reluctantly.
- b. (Very) reluctantly John helped me with my work.
- c. **Not reluctantly did John help me with my work.*
- d. Willingly John helped me with my work.
- (49) a. John ran to the station (very) fast to catch the train.
- b. *?(Very) fast John ran to the station to catch the train.*
- c. **Not fast did John run to the station and so he missed the train.*
- d. Slowly John ran to the station and so he missed the train.
- (50) a. Seemingly John will come here tonight.
- b. **Very seemingly John will come here tonight.*
- c. **Not seemingly John will come here tonight.*
- d. Seemingly John will not come here tonight.
- (51) a. Apparently John noticed minute differences between them.
- b. **Very apparently John noticed minute differences between them.*
- c. **Not apparently John noticed minute differences between them.*
- d. Apparently John did not notice minute differences between them.

I know that this exposition does not constitute sufficient proof for my argument and that it still remains to be investigated more fully and in detail.

The sentences below (52) are probably transformationally related to one another and I think it stands to reason to say that they might be derived from the same deep structure, because they are all, in a sense, paraphrasable.

- (52) a. It seemed that they did not notice it.
- b. They seemed not to notice it.
- c. They did not seem to notice it.
- d. Seemingly (*or* apparently), they did not notice it.

Now let us consider the following sentences.

- (53) a. It seemed that he must have stood there for a long time.
 b. ?He must have seemed to stand there for a long time.
 c. He must seem to have stood there for a long time.

The evidence that sentences (53) are not paraphrasable to one another, while sentences (52) can be converted to each other as stylistic variants is that a so-called 'auxiliary (except *can't*) raising' to the 'it seems' construction is not applicable at all. H. Poutsma explains this briefly thus (Poutsma 1928: Part 1, First Half, 162f):

Only the expanded construction is available when the time sphere of the action or state referred to is subconsequent to that of the utterance. Thus the condensed construction could not be substituted for the expanded in;

It seems to me this matter will never be settled except by arbitration.

—James Payn, *Glow-worm Tales*.

Nor is substitution possible when the subordinate statement is itself complex, as in:

How'er it be, it seems to me, 'Tis only noble to be good.

— Ten., *Lady Clara Verre de Vere*, 53.

The only exception to this is '*can't*' raising.

- (54) a. It seems that I can't solve this problem.
 b. It seems that I am unable to solve this problem.
 c. I seem (to be) unable to solve this problem.
 d. I can't seem to solve this problem.
- (55) a. It seemed that she could not obtain a scholarship.
 b. It seemed that she was unable to obtain a scholarship.
 c. She seemed (to be) unable to obtain a scholarship.
 d. She couldn't seem to obtain a scholarship.

All of these sentences in (54) and (55) are paraphrases of one another respectively, and so they are stylistic variants. A. Hornby made the following comment about this phenomenon (1954:69):

"I seem (to be) unable to solve this problem." may be recomposed (colloquial style) with *can*.

No. 7. I can't seem to solve this problem.

No. 8. He couldn't seem to get out of the habit.

Quite curious is the following relation between sentence (56) a. and sentence (56) b.

- (56) a. John can seem to run very fast.
 b. It seems that John can run very fast.

Since (56) a. and (56) b. are not paraphrases, we can state that the modals *can* and *could* can be raised only if a negative element is raised along with them.

In spite of the fact that the verbs *seem* and *appear* are near synonyms, with the sentence containing the verb *appear*, this 'can't raising' does not work at all.

- (57) a. It appears that John can't drive a car well.
 b. John can't appear to drive a car well.

As sentence (57) a. is not converted into sentence (57) b., they are not derived from the same deep structure at all; that is, they are not stylistic variants at all. Although there are still more interesting facts to be discussed in detail concerning this 'can't seem to' construction, I will refer the interested reader to Langendoen's paper "The 'can't seem to' construction."¹⁹

Verbs such as *seem*, *appear*, *happen*, *chance*, and *turn out* can be semantically defined as non-factives forming one category of verbs, sharing a semantic similarity in 'assertion' or 'belief' but there are several minor-looking but substantial differences in syntactic properties among them, an instance of which is that the rule 'can't raising' does not apply in all cases with these verbs, but only to the verb *seem*. These lexical idiosyncracies can also be pointed out in the *to-be* deletion rule. This transformation is optionally applicable when the main verb is *seem*, *appear*, *turn out* (marginal in American English),²⁰ but not when it is *happen* or *chance*.

- (58) a. That John needs a lot of money seems to me to be doubtful.
 b. That John needs a lot of money seems doubtful to me.
 c. This appears to be the only exception to the rule.
 d. This appears the only exception to the rule.

¹⁹ Langendoen, D.T. 1970. The 'can't seem to' construction. *Linguistic inquiry*. vol. 1. no. 1.25-35.

²⁰ Note the following in Campbell, R.N. and J. W. Lindfors. 1969. *Insights into English structure*. 170. Englewood Cliffs, N.J.: Prentice-Hall.

The boy seems {
 b) a man.
 c) happy.
 e) angry.
 h) a fool.

Unquestionably, *happy* and *angry* are acceptable after *seem*. Most speakers of English would also accept b, *a man*, and h, *a fool*. However, in American English, noun phrases (NP) after *seem* are not as common as they are in British English.

- e. The stranger turned out to be an old friend of John's.
- f. The stranger turned out an old friend of John's.
- g. John happens to be very fortunate.
- h. *John happens very fortunate.
- i. I chanced to be out when Mike called.
- j. *I chanced out when Mike called.

Notice that sentence (58) f. is marginal in American English, though it is quite acceptable in British English. Thus, what the sentences in (58) reveal to us runs as follows; Sentences (58) a.~ f. above are, in each pair, stylistic variants, and whereas sentences (58) g. and i. are grammatically acceptable sentences, (58) h. and j. are not. In other words, the *to-be* deletion rule does not apply in case the preceding verb is *happen* or *chance*. But, on closer examination, with verbs such as *seem*, *appear*, and *turn out* there must be some constraints on the *to-be* deletion rule which I will deal with in the following.

(59) a. John $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ to be $\left\{ \begin{array}{l} \text{under the blanket.} \\ \text{in the attic.} \\ \text{near the door.} \end{array} \right\}$

b. *John $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ $\left\{ \begin{array}{l} \text{under the blanket.} \\ \text{in the attic.} \\ \text{near the door.} \end{array} \right\}$

(60) a. John $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ to be in the money.

b. John $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{*turns out} \end{array} \right\}$ in the money.

Since the verbs *seem*, *appear*, and *turn out* can not be followed by an adverb of place (to say nothing of an adverb of manner), with sentences containing 'to be' followed by adverbials of place, the *to-be* deletion rule does not apply at all. What reveals to us in sentences (60) is that the *to-be* deletion is applicable, if the sentence is composed of 'to be' and adjectivals (even here, if the main verb is *turn out*, American English does not allow the rule to be applied). Quite strange is the interpretation of the following pair of sentences, though the sentence structure is identical.

- (61) a. She turned out to be pregnant.
 b. ?She turned out pregnant.
 c. She turned out to be beautiful.
 d. She turned out beautiful.

Whereas sentence (61) d. is an understandable, expressible expression, sentence (61) b. is apt to be regarded as a joking, comic expression as if produced by the effort of the subject NP, and almost as an unacceptable sentence by the native speaker of English.

- (62) a. It $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ that the engine is working nicely.
 b. The engine $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ to be working nicely.
 c. *The engine $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ working nicely.

The reason why sentences (62) c. are unacceptable is that *working* which follows the main verbs *seem*, *appear*, and *turn out* acts not as a pure adjectival, but as a present participle whose function is of verbal nature. Just observe the examples below.

- (63) Mary $\left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{turns out} \end{array} \right\}$ (to be) $\left\{ \begin{array}{l} \text{very} \\ \text{extremely} \\ \text{rather} \\ \text{quite} \\ \text{really} \\ \text{particularly} \\ \text{fairly} \\ \text{exceedingly} \end{array} \right\}$ $\left\{ \begin{array}{l} \text{amusing.} \\ \text{daring.} \\ \text{charming.} \\ \text{enchanted.} \\ \text{interesting.} \\ \text{hard-working.} \\ * \text{reading a novel.} \\ * \text{working hard.} \\ * \text{sewing.} \\ * \text{playing the piano.} \\ * \text{helping her Mother.} \end{array} \right\}$

In groups like words, *amusing*, *daring*, *charming*, etc. the words ending with *ing* are pure adjectivals, being synonymous respectively with *funny*, *bold*, *delightful*, etc. In this case, the *to-be* deletion rule can be applied, while in sentences containing such words as *reading*, *working*, and *helping*, etc., which are all present participles, the *to-be* deletion rule is not applicable. On the other hand, with the so-called past participles the *to-be* deletion rule works fairly satisfactorily (except the verb *turn out*).

$$(64) \text{ Mary } \left\{ \begin{array}{l} \text{seems} \\ \text{appears} \\ \text{*turns out} \end{array} \right\} (\text{to be}) \left(\left\{ \begin{array}{l} \text{so} \\ \text{very} \\ \text{much} \\ \text{quite} \end{array} \right\} \right) \left\{ \begin{array}{l} \text{excited.} \\ \text{satisfied.} \\ \text{surprised.} \\ \text{interested.} \\ \text{annoyed.} \end{array} \right\}$$

III

In conclusion, I would like to make a summary of what has been studied with regard to constructions related to verbs such as *seem*, *appear*, *happen*, *chance*, and *turn out*. These verbs which are termed intransitive verbs, taking the subject complementation and also defined as non-factive predicates, closely resemble one another syntactically as well as semantically in many respects. They are similar in

- (1) their lack of restrictions in choosing the subject either animate or inanimate.
- (2) their indifference to the passive.
- (3) their ability to combine indefinitely in one sentence.
- (4) their freedom to choose a sentence type, either an expanded construction or a contracted one by applying either extraposition or *it*-replacement.
- (5) their inability to take the noun *fact* with a sentential complement consisting of a *that*-clause or a gerund.
- (6) the impossibility of their taking the gerundial construction.
- (7) their applicability of transformational rules 'downgrading' and 'sentence (modal) adverbialization (except *turn out*).'
- (8) their inability to be used in the progressive tense forms (except *turn out*).
- (9) their ambiguity of being regarded either as entailment predicates or as nonentailment ones (only with verbs *seem* and *appear*).
- (10) their applicability of a *that* deletion rule in the expanded construction.
- (11) their applicability of a *to-be* deletion rule (except *happen* and *chance*).

In this paper, I have so far studied some syntactic problems concerning the constructions that have something to do with non-factive predicates and now I can reach the conclusion that semantic interpretation can be very helpful in solving many complicated issues of syntax. Realizing that semantic feature plays an indispensable role in syntactic behavior of a language, I may maintain with confidence that it is necessary to make good use of not only syntactic properties but also semantic features in the study of grammar of a language.

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